

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number  
**WO 2005/088520 A1**

(51) International Patent Classification<sup>7</sup>: **G06K 9/00**,  
A61B 6/00, 5/05, 5/103, 5/117

(21) International Application Number:  
PCT/US2005/008311

(22) International Filing Date: 11 March 2005 (11.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/552,332 11 March 2004 (11.03.2004) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AUTOMATED SPINE SURVEY ITERATIVE SCAN TECHNIQUE (ASSIST)

(57) Abstract: Automated spine localizing, numbering and autoprescription system enhances correct location of diseased or injured tissue, even allow multi-spectral diagnosis. Externally located this tissue is facilitated by an integrated self adhesive spatial reference and skin marking system that is designed for a variety of modalities to include MRI, CT, SPECT, PET, planar nuclear imaging, radiography, XRT, thermography, optical imaging and 3D space tracking. The device ranges from a point localizer to a more multifunctional and complex grid/phantom system. The specially designed spatial reference(s) is affixed to an adhesive strip with corresponding markings so that after applying the unit to the skin/surface and imaging, the reference can be removed leaving the skin appropriately marked. The localizer itself can also directly adhere to the skin after being detached from the underlying strip. A spine autoprescription process performs image analysis that is able to identify vertebrae and discs even in the presence of abnormalities.



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